GenCore version 5.1.3

OM nucleic - nucleic search, using sw model

Run on: February 24, 2003, 10:13:33 ; Search time 763.054 Seconds
(without alignments)
10583.354 Million cell updates/sec

Title: US-09-922-895-3
Perfect score: 3586
Sequence: 1 GGATCCCTACCTTCCCCATC.....CTATCACAGGGAGAAGTGAA 3586

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 2185239 seqs, 1125999159 residues

Total number of hits satisfying chosen parameters: 4370478

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	3586	100.0	5099	18	AAT93601	Human eosinophil e
c	2	2406	67.1	7201	24	ABL32337	Human immune syste
	3	2271.8	63.4	7201	24	ABL32336	Human immune syste
	4	344.2	9.6	1915	18	AAT85162	Human chemokine re
c	5	209	5.8	3660	22	ABA17973	Human nervous syst
c	6	209	5.8	3662	22	ABA17972	Human nervous syst
c	7	208.2	5.8	235033	19	AAV57926	Hereditary haemoch
c	8	206.2	5.8	11901	20	AAX02998	Human IL-1ra BAC c
	9	206.2	5.8	42299	22	AAK68932	Human immune/haema
c	10	206	5.7	3417	22	AAH18467	Human cDNA sequenc
c	11	205.4	5.7	1273	22	ABA21094	Human nervous syst
c	12	205	5.7	1376	21	AAC99845	Human secreted pro
c	13	205	5.7	10800	22	AAK83329	Human immune/haema
c	14	205	5.7	29629	24	ABL58699	Human kinase encod
c	15	204.8	5.7	20601	22	AAK79760	Human immune/haema
	16	204.2	5.7	8676	22	ABA07159	Human pancreatic c
	17	204.2	5.7	31931	22	ABA07160	Human pancreatic c
	18	204	5.7	1717	24	ABL67066	Thyroid cancer rel
	19	204	5.7	1717	24	AAD25221	Human chemokine (C
c	20	204	5.7	58708	22	AAK64739	Human immune/haema
c	21	203.8	5.7	2607	22	AAF97848	Human neuroblastom
	22	203.8	5.7	4258	22	AAK68397	Human immune/haema
	23	203.8	5.7	23815	22	AAK68678	Human immune/haema
	24	203.8	5.7	23815	22	AAK85169	Human immune/haema
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	27	203.2	5.7	1717	24	AAD25245	Human chemokine (C
	28	203	5.7	4862	22	AAL35929	Human musculoskele
c	29	202.8	5.7	2824	21	AAC59843	Human secreted pro
c	30	202.6	5.6	10012	24	ABL55889	Human small induci
	31	202.6	5.6	13021	22	AAD16553	Human novel protei
	32	202.6	5.6	13021	22	AAS35084	DNA #34 encoding h
	33	202.4	5.6	2345	22	AAH18257	Human cDNA sequenc
	34	202.4	5.6	3985	22	AAK85378	Human immune/haema
	35	202.2	5.6	32186	22	ABA21319	Human nervous syst
	36	202.2	5.6	32186	22	AAK89692	Human digestive sy
	37	202.2	5.6	44848	21	AAA75080	Nucleotide sequenc
c	38	202.2	5.6	319608	22	AAS09301	Human schizophreni
c	39	201.8	5.6	319608	21	AAH51601	Human chromosome 1
c	40	201.8	5.6	325791	22	AAS43104	Human Oestrogen re
c	41	201.6	5.6	21777	22	AAK74096	Human immune/haema
	42	201.6	5.6	54108	24	ABK22782	Human high bone ma
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	44	201.6	5.6	66933	22	ABA82625	Human HBM gene reg
	45	201.6	5.6	72049	22	ABA82623	Human HBM gene reg

ALIGNMENTS

RESULT 1
AAT93601
ID AAT93601 standard; cDNA; 5099 BP.
XX
AC AAT93601;
XX
DT 07-MAY-1998 (first entry)
XX
DE Human eosinophil eotaxin receptor CC CKR3 encoding cDNA.
XX
KW Eosinophil eotaxin receptor; CC CKR3; human; treatment; dermatitis;
KW atopic condition; allergic rhinitis; conjunctivitis; bronchial asthma;
KW beta-chemokine receptor; viral infection; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT misc_feature 1..3586
FT /*tag= a
FT /note= "5' genomic DNA flanking sequence"
FT CDS 3587..4654
FT /*tag= b
FT /product= "human eosinophil eotaxin receptor"
FT misc_feature 4655..5099
FT /*tag= c
FT /note= "terminator region"
XX
PN WO9741154-A1.
XX
PD 06-NOV-1997.
XX
PF 24-APR-1997; 97WO-US06568.

XX
PR 17-JAN-1997; 97GB-0000894.
PR 26-APR-1996; 96US-0016158.
PR 26-APR-1996; 96US-0017113.
XX
PA (MERI) MERCK & CO INC.
XX
PI Daugherty BL, Demartino JA, Siciliano SJ, Springer MS;
XX
DR WPI; 1997-549685/50.
DR P-PSDB; AAW31850.
XX
PT New isolated human eosinophil eotaxin receptor - used to develop
PT products for treating and preventing atopic conditions e.g. allergic
PT rhinitis, dermatitis, conjunctivitis and bronchial asthma
XX
PS Claims 12, 13, 14; Pages 16-20; 51pp; English.
XX
CC This cDNA encodes a human eosinophil eotaxin receptor. This 5099 base
CC pair sequence comprises a 1065 base pair open reading frame encoding a
CC 355 amino acid eosinophil eotaxin receptor protein, flanked by a 5'
CC genomic DNA sequence and a 3' terminator region. This novel eosinophil
CC eotaxin receptor is a human beta-chemokine receptor designated CC CKR3.
CC Agents which bind to this eosinophil eotaxin receptor can be used for
CC the treatment and prevention of atopic conditions such as allergic
CC rhinitis, dermatitis, conjunctivitis and bronchial asthma. Agents which
CC block this eosinophil eotaxin receptor can be used to prevent viral
CC infection in healthy individuals and slow or halt viral progression
CC in infected patients.
XX
SQ Sequence 5099 BP; 1388 A; 1171 C; 1013 G; 1527 T; 0 other;

Query Match 100.0%; Score 3586; DB 18; Length 5099;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 3586; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy     61 CCCCCAAGGAATGTCTCCCTGTGGGGCACTTCCTTACCAGATGGGATGGCCAGTGCGGTT 120
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Qy    121 AAGTTGGTGGTCAGGCAGAAAAAAAAGATCTAGTTTGTACTCTTGAGAGTTCCTCGGTTT 180
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Qy    721 GTTTGGAGACTAAAGAATCATTGCACATTTCACTGCTGAGTTGTATTGTGAGTAATTTTA 780
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Qy    781 GTTGACCTCACTTTGTAAATCTTGCACACGGGGCAATCCAATATCTGCACAAGAGATATG 840
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Qy   1081 ATTTATTTATTTATTTATTTTTTGAGATGGAGTCTGGCTGTCGCCCAGGCTGGAGTGCAG 1140
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Db   2941 GACAGGAGAAATGGACATGGATAGAGACTAAAGATCTAGCCCAAATTTTATATTTACTTG 3000

Qy   3001 TTAGAGGATTTTGAACAAATTACTAAATTTCTTCAAGGTTCAATTTCCCCATTAACTATA 3060
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   3001 TTAGAGGATTTTGAACAAATTACTAAATTTCTTCAAGGTTCAATTTCCCCATTAACTATA 3060

Qy   3061 ATGAATGTCTCATCATTATGGGGCCCTGGAGAAGCATAATTACTTGTAATTGTAATAATC 3120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   3061 ATGAATGTCTCATCATTATGGGGCCCTGGAGAAGCATAATTACTTGTAATTGTAATAATC 3120

Qy   3121 ATTGTTATTATTATTATACATATTTTGCTTTTAAATGGATAAGGATTTTTAAGGTATATG 3180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   3121 ATTGTTATTATTATTATACATATTTTGCTTTTAAATGGATAAGGATTTTTAAGGTATATG 3180

Qy   3181 TAAACTGTAAAACATAAAATGCAAAATGCCGTAAGAGACAGTAGTAATAATAATGATTAT 3240
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   3181 TAAACTGTAAAACATAAAATGCAAAATGCCGTAAGAGACAGTAGTAATAATAATGATTAT 3240

Qy   3241 TATATTGTTATCATTATCTAGCCTGTTTTTTCCTGTTGTGTATTTCTTCCTTTAAATGCT 3300
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   3241 TATATTGTTATCATTATCTAGCCTGTTTTTTCCTGTTGTGTATTTCTTCCTTTAAATGCT 3300

Qy   3301 TACAGAAATCTGTATCCCCATTCTTCACCACCACCCCACAACATTTCTGCTTCTTTTCCC 3360
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   3301 TACAGAAATCTGTATCCCCATTCTTCACCACCACCCCACAACATTTCTGCTTCTTTTCCC 3360

Qy   3361 ATGCCGGTCATGCTAACTTTGAAAGCTTCAGCTCTTTCCTTCCTCAATCCTTCTCCTGGC 3420
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   3361 ATGCCGGTCATGCTAACTTTGAAAGCTTCAGCTCTTTCCTTCCTCAATCCTTCTCCTGGC 3420

Qy   3421 ACCTCTGATATGCCTTTTGAAATTCATGTTAAAGAATCCCTAGGCTGCTATCACATGTGG 3480
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   3421 ACCTCTGATATGCCTTTTGAAATTCATGTTAAAGAATCCCTAGGCTGCTATCACATGTGG 3480

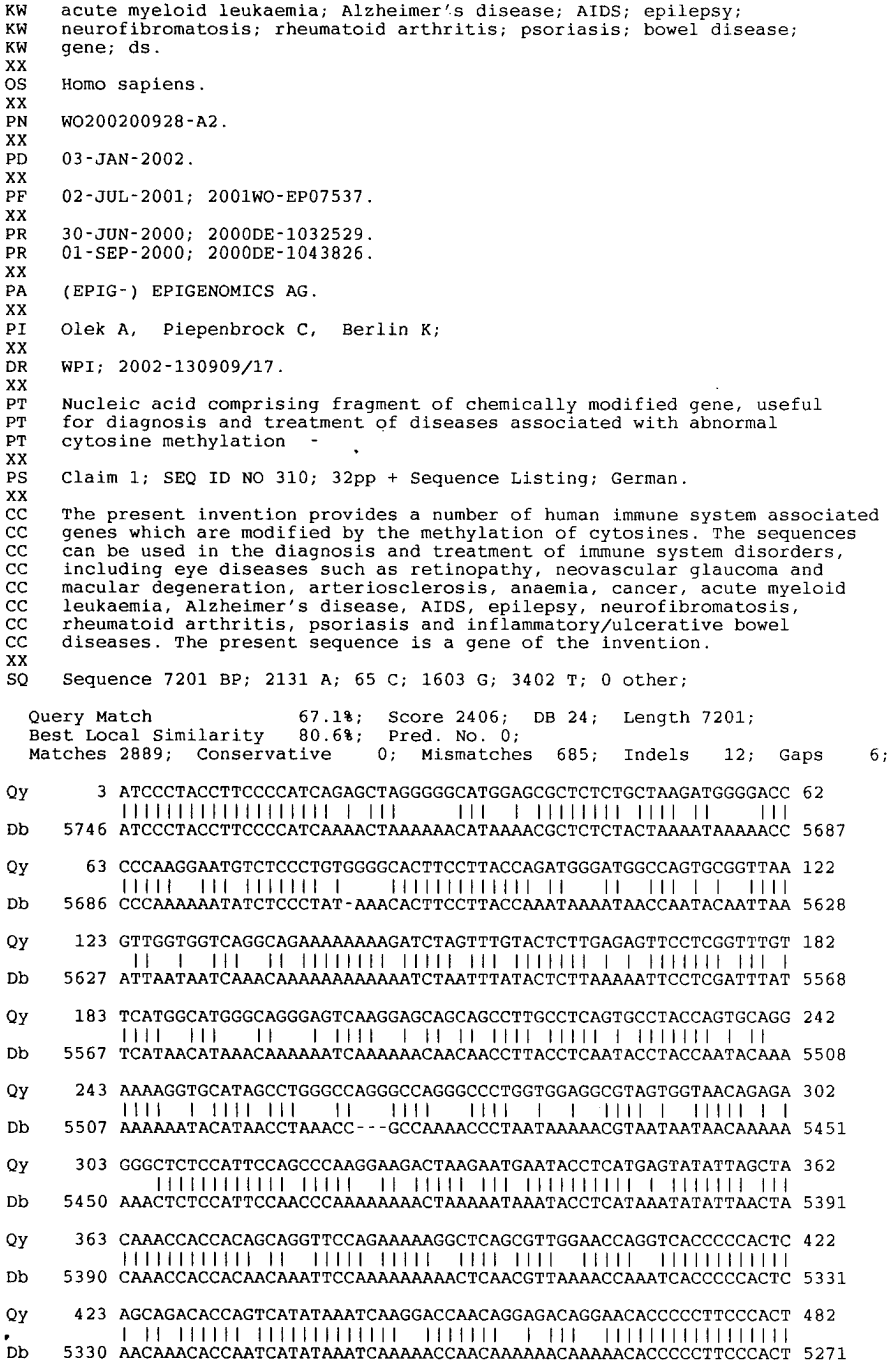
Qy   3481 CATCTTTGTTGAGTACATGAATAAATCAACTGGTGTGTTTTACGAAGGATGATTATGCTT 3540
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   3481 CATCTTTGTTGAGTACATGAATAAATCAACTGGTGTGTTTTACGAAGGATGATTATGCTT 3540

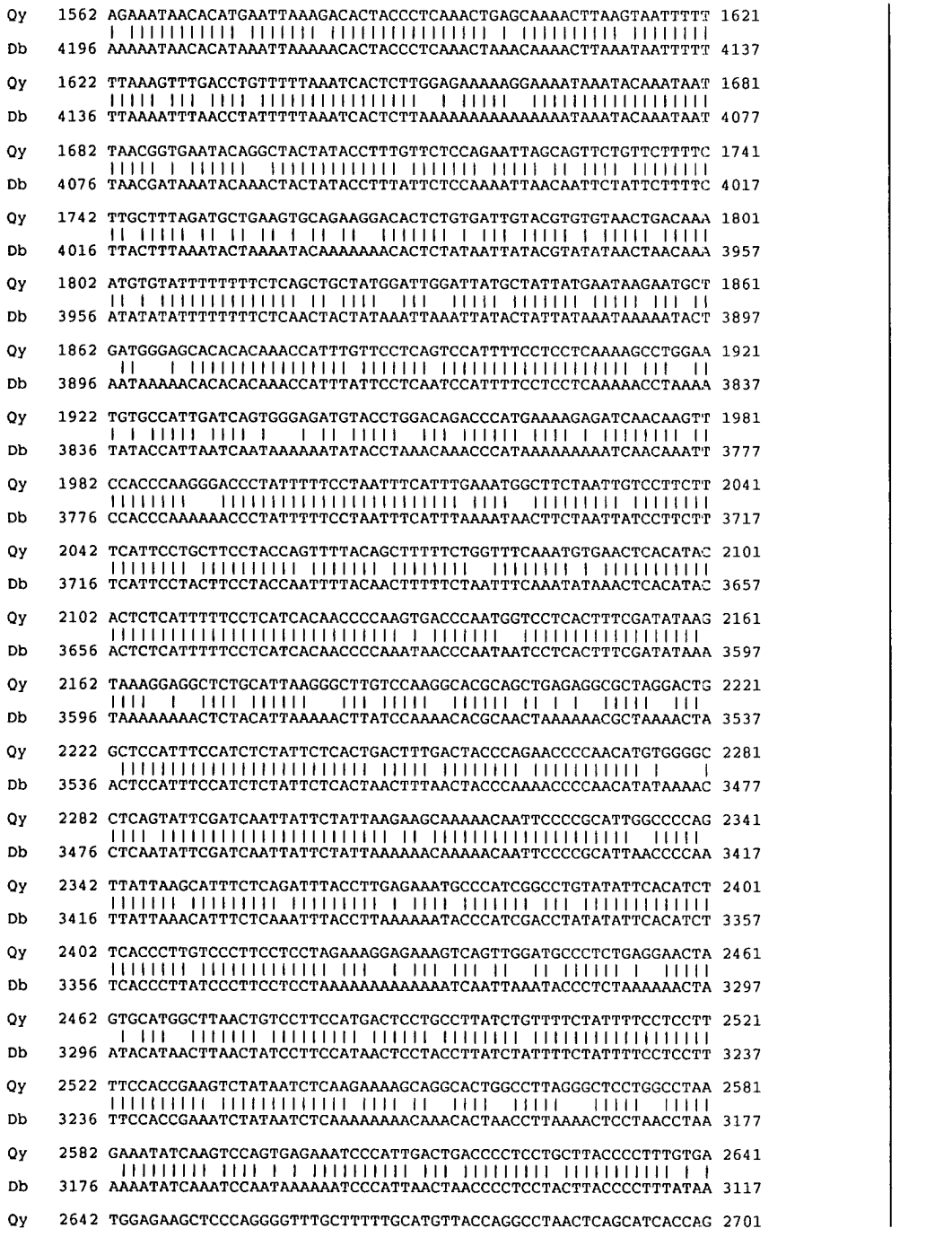
Qy   3541 CATTGTGGGATTGTATTTTTCTTCTTCTATCACAGGGAGAAGTGAA 3586
          ||||||||||||||||||||||||||||||||||||||||||||||
Db   3541 CATTGTGGGATTGTATTTTTCTTCTTCTATCACAGGGAGAAGTGAA 3586
```

RESULT 2
ABL32337/c
ID ABL32337 standard; DNA; 7201 BP.
XX
AC ABL32337;
XX
DT 26-MAR-2002 (first entry)
XX
DE Human immune system associated gene SEQ ID NO: 310.
XX
KW Human; immune system disease; cytosine methylation; antiasthmatic;
KW antiarteriosclerotic; antianaemic; cytostatic; nootropic;
KW neuroprotective; anti-HIV; anticonvulsant; ophthalmological;
KW antirheumatic; antiarthritic; antidiabetic; antipsoriatic;
KW antiinflammatory; cancer; eye disease; arteriosclerosis; anaemia;

KW acute myeloid leukaemia; Alzheimer's disease; AIDS; epilepsy;
KW neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease;
KW gene; ds.
XX
OS Homo sapiens.
XX
PN WO200200928-A2.
XX
PD 03-JAN-2002.
XX
PF 02-JUL-2001; 2001WO-EP07537.
XX
PR 30-JUN-2000; 2000DE-1032529.
PR 01-SEP-2000; 2000DE-1043826.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2002-130909/17.
XX
PT Nucleic acid comprising fragment of chemically modified gene, useful
PT for diagnosis and treatment of diseases associated with abnormal
PT cytosine methylation -
XX
PS Claim 1; SEQ ID NO 310; 32pp + Sequence Listing; German.
XX
CC The present invention provides a number of human immune system associated
CC genes which are modified by the methylation of cytosines. The sequences
CC can be used in the diagnosis and treatment of immune system disorders,
CC including eye diseases such as retinopathy, neovascular glaucoma and
CC macular degeneration, arteriosclerosis, anaemia, cancer, acute myeloid
CC leukaemia, Alzheimer's disease, AIDS, epilepsy, neurofibromatosis,
CC rheumatoid arthritis, psoriasis and inflammatory/ulcerative bowel
CC diseases. The present sequence is a gene of the invention.
XX
SQ Sequence 7201 BP; 2131 A; 65 C; 1603 G; 3402 T; 0 other;

Query Match 67.1%; Score 2406; DB 24; Length 7201;
Best Local Similarity 80.6%; Pred. No. 0;
Matches 2889; Conservative 0; Mismatches 685; Indels 12; Gaps 6;





RESULT 3
ABL32336
ID ABL32336 standard; DNA; 7201 BP.
XX
AC ABL32336;
XX
DT 26-MAR-2002 (first entry)
XX
DE Human immune system associated gene SEQ ID NO: 309.

XX
KW Human; immune system disease; cytosine methylation; antiasthmatic;
KW antiarteriosclerotic; antianaemic; cytostatic; nootropic;
KW neuroprotective; anti-HIV; anticonvulsant; ophthalmological;
KW antirheumatic; antiarthritic; antidiabetic; antipsoriatic;
KW antiinflammatory; cancer; eye disease; arteriosclerosis; anaemia;
KW acute myeloid leukaemia; Alzheimer's disease; AIDS; epilepsy;
KW neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease;
KW gene; ds.
XX
OS Homo sapiens.
XX
PN WO200200928-A2.
XX
PD 03-JAN-2002.
XX
PF 02-JUL-2001; 2001WO-EP07537.
XX
PR 30-JUN-2000; 2000DE-1032529.
PR 01-SEP-2000; 2000DE-1043826.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2002-130909/17.
XX
PT Nucleic acid comprising fragment of chemically modified gene, useful
PT for diagnosis and treatment of diseases associated with abnormal
PT cytosine methylation -
XX
PS Claim 1; SEQ ID NO 309; 32pp + Sequence Listing; German.
XX
CC The present invention provides a number of human immune system associated
CC genes which are modified by the methylation of cytosines. The sequences
CC can be used in the diagnosis and treatment of immune system disorders,
CC including eye diseases such as retinopathy, neovascular glaucoma and
CC macular degeneration, arteriosclerosis, anaemia, cancer, acute myeloid
CC leukaemia, Alzheimer's disease, AIDS, epilepsy, neurofibromatosis,
CC rheumatoid arthritis, psoriasis and inflammatory/ulcerative bowel
CC diseases. The present sequence is a gene of the invention.
XX
SQ Sequence 7201 BP; 2074 A; 65 C; 1393 G; 3669 T; 0 other;

Query Match 63.4%; Score 2271.8; DB 24; Length 7201;
Best Local Similarity 78.2%; Pred. No. 0;
Matches 2805; Conservative 0; Mismatches 772; Indels 10; Gaps 6;

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Db    1454 GGATTTTTATTTTTTTTATTAGAGTTAGGGGGTATGGAGCGTTTTTTGTTAAGATGGGGA 1513

Qy      61 CCCCCAAGGAATGTCTCCCTGTGGGGCACTTCCTTACCAGATGGGATGGCCAGTGCGGTT 120
Db    1514 TTTTTAAGGAATGTTTTTTTGT-GGGTATTTTTTTATTAGATGGGATGGTTAGTGTAGTT 1572

Qy     121 AAGTTGGTGGTCAGGCAGAAAAAAAAGATCTAGTTTGTACTCTTGAGAGTTCCTCGGTTT 180
Db    1573 AAGTTGGTGGTTAGGTAGAAAAAAAAGATTTAGTTTGTATTTTTGAGAGTTTTTCGGTTT 1632

Qy     181 GTTCATGGCATGGGCAGGGAGTCAAGGAGCAGCAGCCTTGCCTCAGTGCCTACCAGTGCA 240
Db    1633 GTTTATGGTATGGGTAGGGAGTTAAGGAGTAGTAGTTTTGTTTTAGTGTTTATTAGTGTA 1692

Qy     241 GGAAAAGGTGCATAGCCTGGGCCAGGGCCAGGGCCCTGGTGGAGGCGTAGTGGTAACAGA 300
Db    1693 GGAAAAGGTGTATAGTTTGGGTC---GTTAGGGTTTTGGTGGAGGCGTAGTGGTAATAGA 1749

Qy     301 GAGGGCTCTCCATTCCAGCCCAAGGAAGACTAAGAATGAATACCTCATGAGTATATTAGC 360
Db    1750 GAGGGTTTTTTATTTTAGTTTAAGGAAGATTAAGAATGAATATTTTATGAGTATATTAGT 1809

Qy     361 TACAAACCACCACAGCAGGTTCCAGAAAAAGGCTCAGCGTTGGAACCAGGTCACCCCCAC 420

Db    1810 TATAAATTATTATAGTAGGTTTTAGAAAAAGGTTTAGCGTTGGAATTAGGTTATTTTTAT 1869

Qy     421 TCAGCAGACACCAGTCATATAAATCAAGGACCAACAGGAGACAGGAACACCCCCTTCCCA 480
Db    1870 TTAGTAGATATTAGTTATATAAATTAAGGATTAATAGGAGATAGGAATATTTTTTTTTTA 1929

Qy     481 CTCTGCCCCATGTCTCAAGTTGTAGTGGCCCTTCCTCCAGATCTCTGCCACCATCTTAGA 540
Db    1930 TTTTGTTTTATGTTTTAAGTTGTAGTGGTTTTTTTTTTAGATTTTTGTTATTATTTTAGA 1989

Qy     541 AAGGAACACTGAAAGAAGAAACTGAAATTATAAGCTGACAGCATAAAGAGGATGAGTAAA 600
Db    1990 AAGGAATATTGAAAGAAGAAATTGAAATTATAAGTTGATAGTATAAAGAGGATGAGTAAA 2049

Qy     601 ACCTAAAATCATTGTTCACATGAATGAATCAAGAGAAGTTTAAACCACTTTGGACTAAAA 660
Db    2050 ATTTAAAATTATTGTTTAAATGAATGAATTAAGAGAAGTTTAAATTATTTTGGATTAAAA 2109

Qy     661 TGTGTGAATCCTTTTTCCTGCTATCCAGCAGATGAGAAGCTGGTAACAGAGACCACAATA 720
Db    2110 TGTGTGAATTTTTTTTTTTGTTATTTAGTAGATGAGAAGTTGGTAATAGAGATTAAAATA 2169

Qy     721 GTTTGGAGACTAAAGAATCATTGCACATTTCACTGCTGAGTTGTATTGTGAGTAATTTTA 780
Db    2170 GTTTGGAGATTAAAGAATTATTGTATATTTTATTGTTGAGTTGTATTGTGAGTAATTTTA 2229

Qy     781 GTTGACCTCACTTTGTAAATCTTGCACACGGGGCAATCCAATATCTGCACAAGAGATATG 840
Db    2230 GTTGATTTTATTTTTGTAAATTTTGTATACGGGTATTTATATTTGT---ATAGAGATATG 2286

Qy     841 TTAACCAGTGGTAAATGCTGCATGAGGAGATTGGGTGATTTTTACTTTCGTTTTTGTGCT 900
Db    2287 TTAA-TAGTGGTAAATGTTGTATGAGGAGATTGGGTGATTTTTATTTTCGTTTTTGTGTT 2345

Qy     901 CTTCTTTCTTATTGTTCTTACTTATTTACGATTACCCTATCGTTTTCCCAAAATGTAAAA 960
Db    2346 TTTTTTTTTTATTGTTTTTATTTATTTACGATTATTTTATCGTTTT-TTAAAATGTAAAA 2404

Qy     961 GGCCATTTTGAAAGCCTAATTCAAACCTCTTCACTATTTTGTATCTAAGTATTCACCTTG 1020
Db    2405 GGTTATTTTGAAAGTTTAATTTAAATTTTTTTATTATTTTGTATTTAAGTATTTATTTTG 2464

Qy    1021 ATTGAGACTGGGTAGACAGGTGAAAACCATATCAGGTTTTTAATTTTTTAATTTTTAATT 1080
Db    2465 ATTGAGATTGGGTAGATAGGTGAAAATTATATTAGGTTTTTAATTTTTTAATTTTTAATT 2524

Qy    1081 ATTTATTTATTTATTTATTTTTTGAGATGGAGTCTGGCTGTCGCCCAGGCTGGAGTGCAG 1140
Db    2525 ATTTATTTATTTATTTATTTTTTGAGATGGAGTTTGGTTGTCGTTTAGGTTGGAGTGTAG 2584

Qy    1141 CGGCGTGATCACAGTTCACTGCAGCCTCAACCTTCTAGGCTCAAGGGATTCTCCCACCTC 1200
Db    2585 CGGCGTGATTATAGTTTATTGTAGTTTTAATTTTTTAGGTTTAAGGGATTTTTTTATTTT 2644

Qy    1201 AGCCCCCCAAGTAGTTGGGACCACACGTATGCGCCACCATGCCTGGCTAATTTCTTATTT 1260
Db    2645 AGTTTTTTAAGTAGTTGGGATTATACGTATGCGTTATTATGTTTGGTTAATTTTTTATTT 2704

Qy    1261 TTTTGTAGAGATAGGATCTCACTATATTGTCCAGGCTGGTCTTGAATTCCTGGGCTCAGG 1320
Db    2705 TTTTGTAGAGATAGGATTTTATTATATTGTTTAGGTTGGTTTTGAATTTTTGGGTTTAGG 2764

Qy    1321 TGAGCCTCCCACCTGGGCCTCCCAAAGTACTGGGATTACAGGCATGAGCCAAGGTCCCCT 1380
Db    2765 TGAGTTTTTTATTTGGGTTTTTTAAAGTATTGGGATTATAGGTATGAGTTAAGGTTTTTT 2824

Qy    1381 GCCCATATGAGATTTTCTGTCTCTGATCCCATGCAGCTAGTAATCAAGGACTTGGCTGCT 1440
Db    2825 GTTTATATGAGATTTTTTGTTTTTGATTTTATGTAGTTAGTAATTAAGGATTTGGTTGTT 2884

Qy    1441 GACTCTGGAGGACCTGCATGCTTTCTTGAGCTGTGAACTTCAGTGCTAAAAGCTCATAGG 1500
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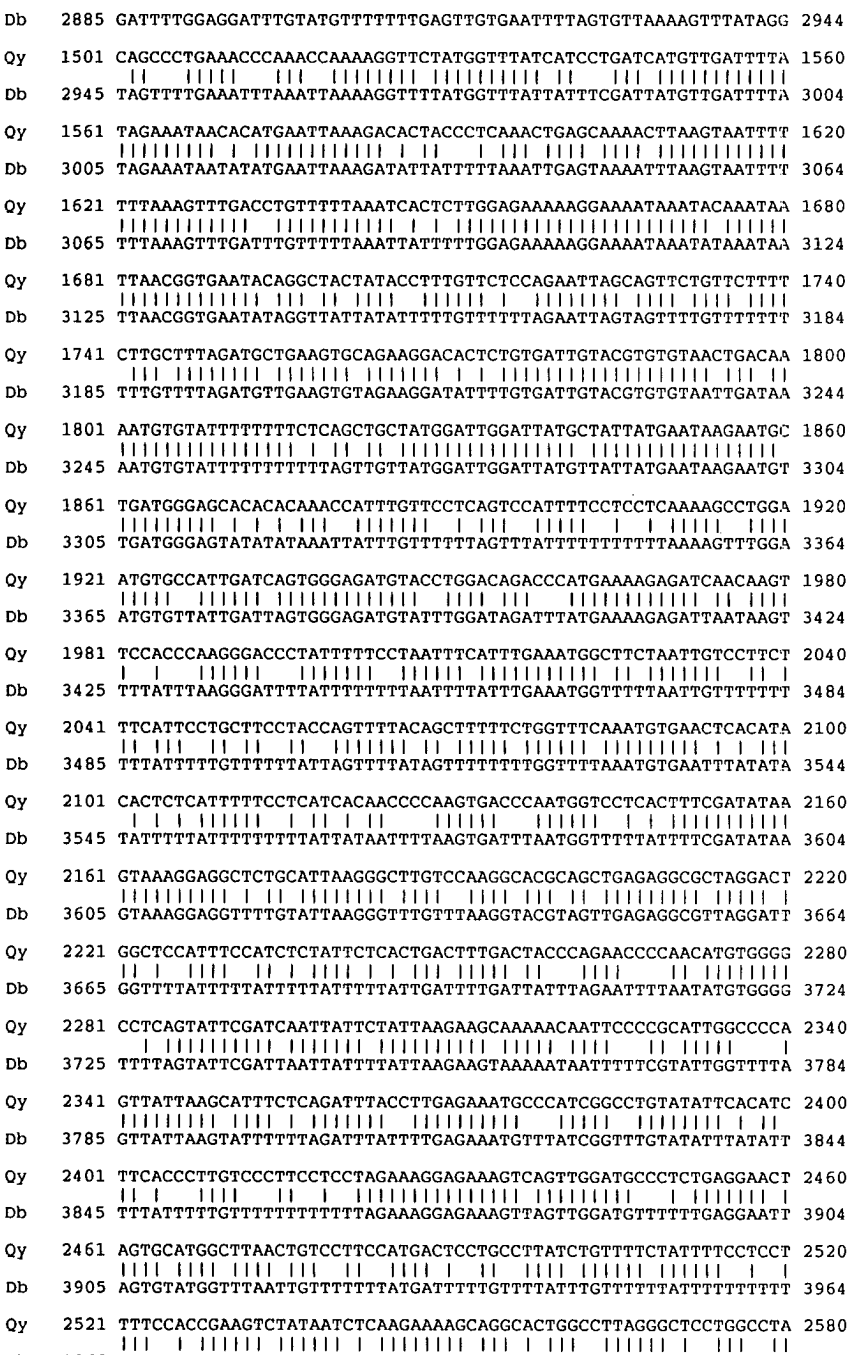

RESULT 4
AAT85162
ID AAT85162 standard; cDNA; 1915 BP.

```
XX
AC   AAT85162;
XX
DT   14-DEC-1997  (first entry)
XX
DE   Human chemokine receptor 88-2B cDNA.
XX
KW   Chemokine receptor 88-2B; atherosclerosis; rheumatoid arthritis;
KW   tumour; asthma; viral infection; AIDS; inflammation;
KW   autoimmune disease; therapy; diagnosis; leukocyte trafficking;
KW   G protein coupled receptor; human; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             362..1429
FT                   /*tag=  a
XX
PN   WO9722698-A2.
XX
PD   26-JUN-1997.
XX
PF   20-DEC-1996;   96WO-US20759.
XX
PR   07-JUN-1996;   96US-0661393.
PR   20-DEC-1995;   95US-0575967.
XX
PA   (ICOS-) ICOS CORP.
XX
PI   Gray PW,  Raport CJ,  Schweickart VL;
XX
DR   WPI; 1997-341689/31.
DR   P-PSDB; AAW27124.
XX
PT   New nucleic acid encoding chemokine receptors 88-2B and 88C - used
PT   to modulate leukocyte trafficking, e.g. for treatment of
PT   inflammation, tumours, viral infections, autoimmune diseases, etc.
XX
PS   Claim 7; Page 48-50; 65pp; English.
XX
CC   This sequence comprises a full-length cDNA coding for novel human
CC   chemokine receptor 88-2B (AAW27124), a G protein coupled receptor that
CC   is involved in leukocyte trafficking.  The 88-2B cDNA was obtained
CC   from a macrophage cDNA library using 88-2B-specific primers.  A
CC   full-length clone (see AAT89161) for chemokine receptor 88C (AAW27123)
CC   was also obtained.  88C and 88-2B cDNAs can be used to produce
CC   recombinant polypeptides in transformed host cells for use in the
CC   treatment of e.g. atherosclerosis, rheumatoid arthritis, tumours,
CC   asthma, viral infection, AIDS and inflammatory conditions.  Nucleic
CC   acid fragments can be used to isolate genomic sequences, to detect
CC   alleles of the gene (for diagnosis or in gene therapy), to alter
CC   receptor genetics to facilitate identification of modulators and to
CC   produce knockout animals, and (antisense forms) to alter/study the
CC   genetics and expression of the receptor.
XX
SQ   Sequence 1915 BP; 488 A; 470 C; 373 G; 584 T; 0 other;

  Query Match             9.6%;  Score 344.2;  DB 18;  Length 1915;
  Best Local Similarity   98.9%;  Pred. No. 4.1e-63;
  Matches  357;  Conservative    0;  Mismatches    3;  Indels    1;  Gaps    1;

Qy   3227 ATAATAATGATTATTATATTGTTATCATTATCTAGCCTGTTTTTTCCTGTTGTGTATTTC 3286
           ||||||||||||||||||||||||||||||||||||||||||||||||||| ||||||||
Db      1 ATAATAATGATTATTATATTGTTATCATTATCTAGCCTGTTTTTTCCTGTTTTGTATTTC 60

Qy   3287 TTCCTTTAAATGCTTACAGAAATCTGTATCCCCATTCTTCACCACCACCCCACAACATTT 3346
           |||||||||||||| ||||||||||||||||||||||||||||||||||||||||||||
Db     61 TTCCTTTAAATGCTTTCAGAAATCTGTATCCCCATTCTTCACCACCACCCCACAACATTT 120

Qy   3347 CTGCTTCTTTTCCCATGCC-GGTCATGCTAACTTTGAAAGCTTCAGCTCTTTCCTTCCTC 3405
           |||||||||||||||||| |||||||||||||||||||||||||||||||||||||||||
Db    121 CTGCTTCTTTTCCCATGCCGGGTCATGCTAACTTTGAAAGCTTCAGCTCTTTCCTTCCTC 180

Qy   3406 AATCCTTCTCCTGGCACCTCTGATATGCCTTTTGAAATTCATGTTAAAGAATCCCTAGGC 3465
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Db    181 AATCCTTTTCCTGGCACCTCTGATATGCCTTTTGAAATTCATGTTAAAGAATCCCTAGGC 240

Qy   3466 TGCTATCACATGTGGCATCTTTGTTGAGTACATGAATAAATCAACTGGTGTGTTTTACGA 3525
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    241 TGCTATCACATGTGGCATCTTTGTTGAGTACATGAATAAATCAACTGGTGTGTTTTACGA 300

Qy   3526 AGGATGATTATGCTTCATTGTGGGATTGTATTTTTCTTCTTCTATCACAGGGAGAAGTGA 3585
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    301 AGGATGATTATGCTTCATTGTGGGATTGTATTTTTCTTCTTCTATCACAGGGAGAAGTGA 360

Qy   3586 A 3586
           |
Db    361 A 361


RESULT 5
ABA17973/c
ID   ABA17973 standard; DNA; 3660 BP.
XX
AC   ABA17973;
XX
DT   23-JAN-2002  (first entry)
XX
DE   Human nervous system related polynucleotide SEQ ID NO 10304.
XX
KW   Human; nootropic; neuroprotective; cytostatic; dermatological; virucide;
KW   immunosuppressive; antiinflammatory; anti-HIV; antibacterial; vulnerary;
KW   antiparkinsonian; antisickling; antianaemic; antiarthritic; cancer;
KW   antirheumatic; hepatotropic; cerebroprotective; antiinflammatory;
KW   antiallergic; antidiabetic; antiulcer; anticonvulsant; antifungal;
KW   antiparasitic; cardiant; immune disorder; cardiovascular disorder;
KW   neurological disease; infection; nephrotropic; gene therapy; vaccine; ds.
XX
OS   Homo sapiens.
XX
PN   WO200159063-A2.
XX
PD   16-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US01334.
XX
PR   31-JAN-2000; 2000US-0179065.
PR   04-FEB-2000; 2000US-0180628.
PR   24-FEB-2000; 2000US-0184664.
PR   02-MAR-2000; 2000US-0186350.
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PR 18-AUG-2000; 2000US-0226279.
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PR 17-NOV-2000; 2000US-0249214.
PR 17-NOV-2000; 2000US-0249215.
PR 17-NOV-2000; 2000US-0249216.
PR 17-NOV-2000; 2000US-0249217.
PR 17-NOV-2000; 2000US-0249218.
PR 17-NOV-2000; 2000US-0249244.
PR 17-NOV-2000; 2000US-0249245.
PR 17-NOV-2000; 2000US-0249264.
PR 17-NOV-2000; 2000US-0249265.
PR 17-NOV-2000; 2000US-0249297.
PR 17-NOV-2000; 2000US-0249299.
PR 17-NOV-2000; 2000US-0249300.
PR 01-DEC-2000; 2000US-0250391.
PR 01-DEC-2000; 2000US-0251160.
PR 05-DEC-2000; 2000US-0251030.
PR 05-DEC-2000; 2000US-0251988.
PR 05-DEC-2000; 2000US-0256719.
PR 06-DEC-2000; 2000US-0251479.
PR 08-DEC-2000; 2000US-0251856.
PR 08-DEC-2000; 2000US-0251868.
PR 08-DEC-2000; 2000US-0251869.
PR 08-DEC-2000; 2000US-0251989.
PR 08-DEC-2000; 2000US-0251990.
PR 11-DEC-2000; 2000US-0254097.
PR 05-JAN-2001; 2001US-0259678.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-541565/60.
XX
PT Nucleic acids encoding 3224 human nervous system antigen polypeptides,
PT useful for preventing, diagnosing and/or treating nervous system
PT cancers and metastases -
XX
PS Disclosure; SEQ ID NO 10304; 1701pp + Sequence Listing; English.
XX
CC The invention relates to novel genes (ABA11004-ABA21534) and proteins
CC (ABB14678-ABB18001) useful for preventing, treating or ameliorating
CC medical conditions e.g. by protein or gene therapy. The genes are
CC isolated from a range of human tissues disclosed in the specification.
CC The nucleic acids, proteins, antibodies and (ant)agonists are useful
CC in the diagnosis, treatment and prevention of: (a) cancer, e.g. breast
CC and ovarian cancer and other cancers of the adrenal gland, bone, bone
CC marrow, breast, gastrointestinal tract, liver, lung, or urogenital;
CC (b) immune disorders e.g. Addison's disease, allergies, autoimmune
CC haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's
CC disease, multiple sclerosis, rheumatoid arthritis and ulcerative
CC colitis; (c) cardiovascular disorders such as myocardial ischaemias;
CC (d) wound healing; (e) neurological diseases e.g. cerebral anoxia and
CC epilepsy; and (f) infectious diseases such as viral, bacterial, fungal
CC and parasitic infections.
CC Note: The sequence data for this patent did not form part of the
CC printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 3660 BP; 981 A; 820 C; 984 G; 875 T; 0 other;

Query Match 5.8%; Score 209; DB 22; Length 3660;
Best Local Similarity 80.3%; Pred. No. 1.9e-34;
Matches 245; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

Qy 1084 TATTTATTTATTTATTTTTTGAGATGGAGTCTGGCTGTCGCCCAGGCTGGAGTGCAGCGG 1143

```
Db   3220 TTTTTTTTTTTTTTTTTTTTGAGAGAGTCTCACTCTGTCGTCCAGGCTGGAGTGCAGTGG 3161

Qy   1144 CGTGATCACAGTTCACTGCAGCCTCAACCTTCTAGGCTCAAGGGATTCTCCCACCTCAGC 1203
          ||||||| | | |||||||| |||| |||| | ||| ||||| |||||||  |||||||
Db   3160 CGTGATCTCGGCTCACTGCAACCTCCACCTCCCAGGTTCAAGCGATTCTCCTGCCTCAGC 3101

Qy   1204 CCCCCAAGTAGTTGGGACCACACGTATGCGCCACCATGCCTGGCTAATTTCTTATTTTTT 1263
          | ||||||||| |||||| | | | |||||| |||||||| ||||||||| |   |||||
Db   3100 CTCCCAAGTAGCTGGGACTATAGGCATGCGCTACCATGCCCGGCTAATTTTTATATTTTT 3041

Qy   1264 TGTAGAGATAGGATCTCACTATATTGTCCAGGCTGGTCTTGAATTCCTGGGCTCAGGTGA 1323
           ||||||| ||||| |||| || ||| ||||||||||||||| |||||   ||| ||||
Db   3040 AGTAGAGACAGGATTTCACCATGTTGGCCAGGCTGGTCTTGAACTCCTGATTTCAAGTGA 2981

Qy   1324 GCCTCCCACCTGGGCCTCCCAAAGTACTGGGATTACAGGCATGAGCCAAGGTCCCCTGCC 1383
            | ||||||| |||||||||||| |||||||||||||| ||||||| | |  || |||
Db   2980 TGCACCCACCTCGGCCTCCCAAAGTGCTGGGATTACAGGCCTGAGCCATGCTGACCGGCC 2921

Qy   1384 CATAT 1388
            | ||
Db   2920 AAAAT 2916


RESULT 6
ABA17972/c
ID   ABA17972 standard; DNA; 3662 BP.
XX
AC   ABA17972;
XX
DT   23-JAN-2002  (first entry)
XX
DE   Human nervous system related polynucleotide SEQ ID NO 10303.
XX
KW   Human; nootropic; neuroprotective; cytostatic; dermatological; virucide;
KW   immunosuppressive; antiinflammatory; anti-HIV; antibacterial; vulnerary;
KW   antiparkinsonian; antisickling; antianaemic; antiarthritic; cancer;
KW   antirheumatic; hepatotropic; cerebroprotective; antiinflammatory;
KW   antiallergic; antidiabetic; antiulcer; anticonvulsant; antifungal;
KW   antiparasitic; cardiant; immune disorder; cardiovascular disorder;
KW   neurological disease; infection; nephrotropic; gene therapy; vaccine; ds.
XX
OS   Homo sapiens.
XX
PN   WO200159063-A2.
XX
PD   16-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US01334.
XX
PR   31-JAN-2000; 2000US-0179065.
PR   04-FEB-2000; 2000US-0180628.
PR   24-FEB-2000; 2000US-0184664.
PR   02-MAR-2000; 2000US-0186350.
PR   16-MAR-2000; 2000US-0189874.
PR   17-MAR-2000; 2000US-0190076.
PR   18-APR-2000; 2000US-0198123.
PR   19-MAY-2000; 2000US-0205515.
PR   07-JUN-2000; 2000US-0209467.
PR   28-JUN-2000; 2000US-0214886.
PR   30-JUN-2000; 2000US-0215135.
PR   07-JUL-2000; 2000US-0216647.
PR   07-JUL-2000; 2000US-0216880.
PR   11-JUL-2000; 2000US-0217487.
PR   11-JUL-2000; 2000US-0217496.
PR   14-JUL-2000; 2000US-0218290.
PR   26-JUL-2000; 2000US-0220963.
PR   26-JUL-2000; 2000US-0220964.
PR   14-AUG-2000; 2000US-0224518.
PR   14-AUG-2000; 2000US-0224519.
PR   14-AUG-2000; 2000US-0225213.
PR   14-AUG-2000; 2000US-0225214.
PR   14-AUG-2000; 2000US-0225266.
PR   14-AUG-2000; 2000US-0225267.
PR   14-AUG-2000; 2000US-0225268.
PR   14-AUG-2000; 2000US-0225270.
PR   14-AUG-2000; 2000US-0225447.
PR   14-AUG-2000; 2000US-0225757.
PR   14-AUG-2000; 2000US-0225758.
PR   14-AUG-2000; 2000US-0225759.
PR   18-AUG-2000; 2000US-0226279.
PR   22-AUG-2000; 2000US-0226681.
PR   22-AUG-2000; 2000US-0226868.
PR   22-AUG-2000; 2000US-0227182.
PR   23-AUG-2000; 2000US-0227009.
PR   30-AUG-2000; 2000US-0228924.
PR   01-SEP-2000; 2000US-0229287.
PR   01-SEP-2000; 2000US-0229343.
PR   01-SEP-2000; 2000US-0229344.
PR   01-SEP-2000; 2000US-0229345.
PR   05-SEP-2000; 2000US-0229509.
PR   05-SEP-2000; 2000US-0229513.
PR   06-SEP-2000; 2000US-0230437.
PR   06-SEP-2000; 2000US-0230438.
PR   08-SEP-2000; 2000US-0231242.
PR   08-SEP-2000; 2000US-0231243.
PR   08-SEP-2000; 2000US-0231244.
PR   08-SEP-2000; 2000US-0231413.
PR   08-SEP-2000; 2000US-0231414.
PR   08-SEP-2000; 2000US-0232080.
PR   08-SEP-2000; 2000US-0232081.
PR   12-SEP-2000; 2000US-0231968.
PR   14-SEP-2000; 2000US-0232397.
PR   14-SEP-2000; 2000US-0232398.
PR   14-SEP-2000; 2000US-0232399.
PR   14-SEP-2000; 2000US-0232400.
PR   14-SEP-2000; 2000US-0232401.
PR   14-SEP-2000; 2000US-0233063.
PR   14-SEP-2000; 2000US-0233064.
PR   14-SEP-2000; 2000US-0233065.
PR   21-SEP-2000; 2000US-0234223.
PR   21-SEP-2000; 2000US-0234274.
PR   25-SEP-2000; 2000US-0234997.
PR   25-SEP-2000; 2000US-0234998.
PR   26-SEP-2000; 2000US-0235484.
PR   27-SEP-2000; 2000US-0235834.
PR   27-SEP-2000; 2000US-0235836.
PR   29-SEP-2000; 2000US-0236327.
PR   29-SEP-2000; 2000US-0236367.
PR   29-SEP-2000; 2000US-0236368.
PR   29-SEP-2000; 2000US-0236369.
PR   29-SEP-2000; 2000US-0236370.
PR   02-OCT-2000; 2000US-0236802.
PR   02-OCT-2000; 2000US-0237037.
PR   02-OCT-2000; 2000US-0237038.
PR   02-OCT-2000; 2000US-0237039.
PR   02-OCT-2000; 2000US-0237040.
PR   13-OCT-2000; 2000US-0239935.
PR   13-OCT-2000; 2000US-0239937.
PR   20-OCT-2000; 2000US-0240960.
PR   20-OCT-2000; 2000US-0241785.
PR   20-OCT-2000; 2000US-0241786.
PR   20-OCT-2000; 2000US-0241787.
PR   20-OCT-2000; 2000US-0241808.
PR   20-OCT-2000; 2000US-0241809.
PR   20-OCT-2000; 2000US-0241826.
PR   20-OCT-2000; 2000US-0242221.
PR   01-NOV-2000; 2000US-0244617.
PR   08-NOV-2000; 2000US-0246474.
PR   08-NOV-2000; 2000US-0246475.
PR   08-NOV-2000; 2000US-0246476.
PR   08-NOV-2000; 2000US-0246477.
PR   08-NOV-2000; 2000US-0246478.
PR   08-NOV-2000; 2000US-0246523.
PR   08-NOV-2000; 2000US-0246524.
PR   08-NOV-2000; 2000US-0246525.
PR   08-NOV-2000; 2000US-0246526.
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PR   08-NOV-2000; 2000US-0246527.
PR   08-NOV-2000; 2000US-0246528.
PR   08-NOV-2000; 2000US-0246532.
PR   08-NOV-2000; 2000US-0246609.
PR   08-NOV-2000; 2000US-0246610.
PR   08-NOV-2000; 2000US-0246611.
PR   08-NOV-2000; 2000US-0246613.
PR   17-NOV-2000; 2000US-0249207.
PR   17-NOV-2000; 2000US-0249208.
PR   17-NOV-2000; 2000US-0249209.
PR   17-NOV-2000; 2000US-0249210.
PR   17-NOV-2000; 2000US-0249211.
PR   17-NOV-2000; 2000US-0249212.
PR   17-NOV-2000; 2000US-0249213.
PR   17-NOV-2000; 2000US-0249214.
PR   17-NOV-2000; 2000US-0249215.
PR   17-NOV-2000; 2000US-0249216.
PR   17-NOV-2000; 2000US-0249217.
PR   17-NOV-2000; 2000US-0249218.
PR   17-NOV-2000; 2000US-0249244.
PR   17-NOV-2000; 2000US-0249245.
PR   17-NOV-2000; 2000US-0249264.
PR   17-NOV-2000; 2000US-0249265.
PR   17-NOV-2000; 2000US-0249297.
PR   17-NOV-2000; 2000US-0249299.
PR   17-NOV-2000; 2000US-0249300.
PR   01-DEC-2000; 2000US-0250391.
PR   01-DEC-2000; 2000US-0251160.
PR   05-DEC-2000; 2000US-0251030.
PR   05-DEC-2000; 2000US-0251988.
PR   05-DEC-2000; 2000US-0256719.
PR   06-DEC-2000; 2000US-0251479.
PR   08-DEC-2000; 2000US-0251856.
PR   08-DEC-2000; 2000US-0251868.
PR   08-DEC-2000; 2000US-0251869.
PR   08-DEC-2000; 2000US-0251989.
PR   08-DEC-2000; 2000US-0251990.
PR   11-DEC-2000; 2000US-0254097.
PR   05-JAN-2001; 2001US-0259678.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-541565/60.
XX
PT   Nucleic acids encoding 3224 human nervous system antigen polypeptides,
PT   useful for preventing, diagnosing and/or treating nervous system
PT   cancers and metastases -
XX
PS   Disclosure; SEQ ID NO 10303; 1701pp + Sequence Listing; English.
XX
CC   The invention relates to novel genes (ABA11004-ABA21534) and proteins
CC   (ABB14678-ABB18001) useful for preventing, treating or ameliorating
CC   medical conditions e.g. by protein or gene therapy. The genes are
CC   isolated from a range of human tissues disclosed in the specification.
CC   The nucleic acids, proteins, antibodies and (ant)agonists are useful
CC   in the diagnosis, treatment and prevention of: (a) cancer, e.g. breast
CC   and ovarian cancer and other cancers of the adrenal gland, bone, bone
CC   marrow, breast, gastrointestinal tract, liver, lung, or urogenital;
CC   (b) immune disorders e.g. Addison's disease, allergies, autoimmune
CC   haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's
CC   disease, multiple sclerosis, rheumatoid arthritis and ulcerative
CC   colitis; (c) cardiovascular disorders such as myocardial ischaemias;
CC   (d) wound healing; (e) neurological diseases e.g. cerebral anoxia and
CC   epilepsy; and (f) infectious diseases such as viral, bacterial, fungal
CC   and parasitic infections.
CC   Note: The sequence data for this patent did not form part of the
CC   printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 3662 BP; 982 A; 820 C; 985 G; 875 T; 0 other;
```

```
  Query Match             5.8%;  Score 209;  DB 22;  Length 3662;
  Best Local Similarity   80.3%;  Pred. No. 1.9e-34;
  Matches  245;  Conservative    0;  Mismatches   60;  Indels    0;  Gaps    0;

Qy   1084 TATTTATTTATTTATTTTTTGAGATGGAGTCTGGCTGTCGCCCAGGCTGGAGTGCAGCGG 1143
          | ||| ||| ||| |||||||||||  |  ||   |||||| ||||||||||||||||| ||
Db   3222 TTTTTTTTTTTTTTTTTTTTGAGAGAGTCTCACTCTGTCGTCCAGGCTGGAGTGCAGTGG 3163

Qy   1144 CGTGATCACAGTTCACTGCAGCCTCAACCTTCTAGGCTCAAGGGATTCTCCCACCTCAGC 1203
          ||||||| | | |||||||| |||| |||| | ||| ||||| ||||||||  |||||||
Db   3162 CGTGATCTCGGCTCACTGCAACCTCCACCTCCCAGGTTCAAGCGATTCTCCTGCCTCAGC 3103

Qy   1204 CCCCCAAGTAGTTGGGACCACACGTATGCGCCACCATGCCTGGCTAATTTCTTATTTTTT 1263
          | ||||||||| |||||| | | | |||||| |||||||| ||||||||| |   |||||
Db   3102 CTCCCAAGTAGCTGGGACTATAGGCATGCGCTACCATGCCCGGCTAATTTTTATATTTTT 3043

Qy   1264 TGTAGAGATAGGATCTCACTATATTGTCCAGGCTGGTCTTGAATTCCTGGGCTCAGGTGA 1323
          ||||||| |||| |||| || ||| |||||||||||||||| ||||   ||| ||||
Db   3042 AGTAGAGACAGGATTTCACCATGTTGGCCAGGCTGGTCTTGAACTCCTGATTTCAAGTGA 2983

Qy   1324 GCCTCCCACCTGGGCCTCCCAAAGTACTGGGATTACAGGCATGAGCCAAGGTCCCCTGCC 1383
            | ||||||| |||||||||||| |||||||||||||| ||||||| | |  || |||
Db   2982 TGCACCCACCTCGGCCTCCCAAAGTGCTGGGATTACAGGCCTGAGCCATGCTGACCGGCC 2923

Qy   1384 CATAT 1388
          | ||
Db   2922 AAAAT 2918


RESULT 7
AAV57926/c
ID   AAV57926 standard; DNA; 235033 BP.
XX
AC   AAV57926;
XX
DT   23-DEC-1998  (first entry)
XX
DE   Hereditary haemochromatosis subregion from an unaffected individual.
XX
KW   Bovine butyrophilin; BT; human hereditary haemochromatosis; HFE;
KW   diagnosis; iron metabolism; NPT3; NPT4; RoRet; BTF1; BTF2; BTF3;
KW   BTF4; BTF5; milk protein; lupus; Sjogren's syndrome; hypophosphatemia;
KW   type 1 sodium transport gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO9814466-A1.
XX
PD   09-APR-1998.
XX
PF   30-SEP-1997;   97WO-US17658.
XX
PR   07-MAY-1997;   97US-0852495.
PR   01-OCT-1996;   96US-0724394.
XX
PA   (PROG-) PROGENTIOR INC.
XX
PI   Feder JN,  Kronmal GS,  Lauer PM,  Ruddy DA,  Thomas WJ;
PI   Tsuchihashi Z,  Wolff RK;
XX
DR   WPI; 1998-240014/21.
XX
PT   Hereditary haemochromatosis gene products - used to develop products
PT   for the diagnosis and treatment of hereditary disorders in iron
PT   metabolism
XX
PS   Example 2; Fig 8; 209pp; English.
XX
CC   The present invention describes hereditary haemochromatosis gene
CC   products from the human haemochromatosis gene. The present sequence
CC   represents a hereditary haemochromatosis subregion from an individual
CC   unaffected by hereditary haemochromatosis (HH). Also described is a
CC   method to determine the presence or absence of the common hereditary
```

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CC   haemochromatosis (HFE) gene mutation in an individual comprising:
CC   (a) providing DNA or RNA from the individual; and (b) assessing the
CC   DNA or RNA for the presence or absence of a haplotype or genotype where
CC   the presence or absence of the haplotype genotype indicates the likely
CC   presence of the HFE gene mutation in the genome of the individual. The
CC   HFE gene sequences from the present invention can be used to develop
CC   products for use in the diagnosis and treatment of HFE. The present
CC   invention also describes BTF genes, which are homologues of the milk
CC   protein butyrophilin (BT), and can be used in the production of agonists
CC   and antagonists of BT function. Also described are: (1) a RoRet gene
CC   which can be used to develop products for the study, diagnosis and
CC   treatment of lupus and Sjogren's syndrome; and (2) NPT3 and NPT4 genes
CC   which are homologues of a type 1 sodium transport gene, and can
CC   similarly be used for hypophosphatemia.
XX
SQ   Sequence 235033 BP; 68786 A; 48466 C; 49441 G; 68340 T; 0 other;

  Query Match             5.8%;  Score 208.2;  DB 19;  Length 235033;
  Best Local Similarity   75.7%;  Pred. No. 9.2e-34;
  Matches  258;  Conservative    0;  Mismatches   83;  Indels    0;  Gaps    0;

Qy    1062 AATTTTTTAATTTTTAATTATTTATTTATTTATTTATTTTTTGAGATGGAGTCTGGCTGT 1121
           |||| ||    || | ||||||  | |  |||||  | ||||||||||||||||  ||||
Db  200484 AATTATTATTATTATTATTATTATTATTATTATTATTATTTTGAGATGGAGTCTCACTGT 200425

Qy    1122 CGCCCAGGCTGGAGTGCAGCGGCGTGATCACAGTTCACTGCAGCCTCAACCTTCTAGGCT 1181
           ||||||||||||||||||| ||| ||||| ||| ||| ||||  |||  ||| | ||| |
Db  200424 CGCCCAGGCTGGAGTGCAGTGGCATGATCTCAGCTCATTGCAATCTCTGCCTCCCAGGTT 200365

Qy    1182 CAAGGGATTCTCCCACCTCAGCCCCCCAAGTAGTTGGGACCACACGTATGCGCCACCATG 1241
           |||| ||| ||||| | |||||| ||  |||| ||||  ||| ||  || |||||| |
Db  200364 CAAGTGATCCTCCCGCTTCAGCCTCCTGAGTAGCTGGGATTACAGGTGGGCACCACCACG 200305

Qy    1242 CCTGGCTAATTTCTTATTTTTTTGTAGAGATAGGATCTCACTATATTGTCCAGGCTGGTC 1301
           |||||||| ||| |   ||||| |||||||  | | |||| || ||| ||||||||||
Db  200304 CCTGGCTACTTTTTGTATTTTTAGTAGAGATGAGGTTTCACCATTTTGGCCAGGCTGGTC 200245

Qy    1302 TTGAATTCCTGGGCTCAGGTGAGCCTCCCACCTGGGCCTCCCAAAGTACTGGGATTACAG 1361
           ||||||| |||  |||| |||| |||||  ||| ||||||||||||| |||||||||| |
Db  200244 TTGAATTTCTGACCTCATGTGATCCTCCTGCCTCGGCCTCCCAAAGTGCTGGGATTACGG 200185

Qy    1362 GCATGAGCCAAGGTCCCCTGCCCATATGAGATTTTCTGTCT 1402
           || ||| |||  |  ||| ||| | ||   || || | | |
Db  200184 GCTTGATCCACTGCGCCCAGCCAACATACTATATTTTTTTT 200144


RESULT 8
AAX02998/c
ID   AAX02998 standard; DNA; 11901 BP.
XX
AC   AAX02998;
XX
DT   22-JUN-1999  (first entry)
XX
DE   Human IL-1ra BAC contiguous DNA sequence 43.
XX
KW   Tango-77; human; IL-1ra; cytokine superfamily; inflammation; inhibition;
KW   interleukin-1 receptor; IL-1R; regulation; asthma; rheumatoid arthritis;
KW   chronic myelogenous leukaemia; psoriasis; inflammatory bowel disease;
KW   growth factors; treatment; IL-1 receptor complex; BAC; ss.
XX
OS   Homo sapiens.
XX
PN   WO9906426-A1.
XX
PD   11-FEB-1999.
XX
PF   03-AUG-1998;   98WO-US16102.
XX
PR   02-JUL-1998;   98US-0091650.
PR   04-AUG-1997;   97US-0054646.
XX
PA   (MILL-) MILLENNIUM BIOTHERAPEUTICS INC.
XX
PI   Pan Y;
XX
DR   WPI; 1999-153692/13.
XX
PT   New isolated nucleic acid encoding the new human cytokine Tango-77 -
PT   used to inhibit inflammation and to screen for specific modulators
XX
PS   Example 5; Figure 3; 226pp; English.
XX
CC   AAX02956-X03048 and AAX22301-X22304 are overlapping BAC genomic
CC   sequences containing alternatively spliced forms of human IL-1ra. Such
CC   fragments are used in the method of the invention which describes the
CC   isolation of a novel human TANGO-77 encoding nucleic acid and protein.
CC   Tango-77 is a member of the cytokine superfamily that is expected to
CC   inhibit inflammation by binding to the interleukin-1 receptor (IL-1R). It
CC   may also bind to a new receptor so could regulate other cellular
CC   processes associated with acute or chronic inflammation, e.g. asthma,
CC   chronic myelogenous leukaemia, rheumatoid arthritis, psoriasis and
CC   inflammatory bowel disease. It may also induce or suppress interleukins,
CC   cytokines and growth factors. Modulators of this protein are used to
CC   treat or prevent conditions associated with abnormal levels of
CC   inflammation, or activity of IL-1 or its receptor complex.
XX
SQ   Sequence 11901 BP; 3552 A; 2724 C; 2438 G; 3179 T; 8 other;

  Query Match             5.8%;  Score 206.2;  DB 20;  Length 11901;
  Best Local Similarity   78.9%;  Pred. No. 1e-33;
  Matches  258;  Conservative    0;  Mismatches   68;  Indels    1;  Gaps    1;

Qy    1058 TTTTAATTTTTTAATTTTTAATTATTTATTTATTTATTTATTTTTTGAGATGGAGTCTGG 1117
           || |  ||| ||  |||||   | ||| |||  || ||| ||||||||| |||||||
Db   10885 TTGTTTTTTGTTTTTTTTTTGGTTTTTTTTTTGTTTTTTTTTTTTTGAGACGGAGTCTCC 10826

Qy    1118 CTGTCGCCCAGGCTGGAGTGCAGCGGCGTGATCACAGTTCACTGCAGCCTCAACCTTCTA 1177
           |||||  |||||||||||||||||  |||  ||||  | |  |||||||  ||||  |||| | |
Db   10825 CTGTCACCCAGGCTGGAGTGCAGTGGCACGATCTCTGCTCACTGCAACCTCCACCTCCCA 10766

Qy    1178 GGCTCAAGGGATTCTCCCACCTCAGCCCCCCAAGTAGTTGGGACCACACGTATGCGCCAC 1237
           || ||||  |||||||  |||||||| |||||||| ||||| ||| || ||| ||||
Db   10765 GGTTCAAATGATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGGTGTGCACCAC 10706

Qy    1238 CATGCCTGGCTAATTTCTTATTTTTTTGTAGAGATAGGATCTCACTATATTGTCCAGGCT 1297
           ||||||  ||||||||  || ||||| |||||||| || | |||| || |||  |||| |
Db   10705 CATGCCCAGCTAATTTTGTA-TTTTTAGTAGAGATGGGGTTTCACCATGTTGATCAGGTT 10647

Qy    1298 GGTCTTGAATTCCTGGGCTCAGGTGAGCCTCCCACCTGGGCCTCCCAAAGTACTGGGATT 1357
           |||||||| |||||   |||||||| || ||||||| |||||||||||| ||||||||
Db   10646 GGTCTTGAACTCCTGACTTCAGGTGATCCACCCACCTTGGCCTCCCAAAGTGCTGGGATT 10587

Qy    1358 ACAGGCATGAGCCAAGGTCCCCTGCCC 1384
           ||||||||| ||||  || ||  ||||
Db   10586 ACAGGCATGGGCCACTGTGCCTGGCCC 10560


RESULT 9
AAK68932
ID   AAK68932 standard; DNA; 42299 BP.
XX
AC   AAK68932;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:23744.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
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XX
PF 17-JAN-2001; 2001WO-US01354.
XX
PR 31-JAN-2000; 2000US-0179065.
PR 04-FEB-2000; 2000US-0180628.
PR 24-FEB-2000; 2000US-0184664.
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PR 19-MAY-2000; 2000US-0205515.
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PR 28-JUN-2000; 2000US-0214886.
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PR 08-DEC-2000; 2000US-0251989.
PR 08-DEC-2000; 2000US-0251990.
PR 11-DEC-2000; 2000US-0254097.
PR 05-JAN-2001; 2001US-0259678.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX

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PT   Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT   useful for preventing, diagnosing and/or treating cancers and
PT   metastasis -
XX
PS   Disclosure; SEQ ID NO 23744; 3071pp + Sequence Listing; English.
XX
CC   AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC   amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC   activity, and can be used in gene therapy and vaccine production. (I)
CC   proteins and polynucleotides may be used in the prevention, diagnosis and
CC   treatment of diseases associated with inappropriate (I) expression. For
CC   example, they may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting
CC   the nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention.
XX
SQ   Sequence 42299 BP; 10898 A; 8541 C; 8383 G; 14477 T; 0 other;

  Query Match             5.8%;  Score 206.2;  DB 22;  Length 42299;
  Best Local Similarity   76.4%;  Pred. No. 1.5e-33;
  Matches  253;  Conservative    0;  Mismatches   78;  Indels    0;  Gaps    0;

Qy    1057 TTTTTAATTTTTTAATTTTTAATTATTTATTTATTTATTTATTTTTTGAGATGGAGTCTG 1116
           || ||  | ||||   ||||| ||||||||||||||||||||||||  || | ||  ||
Db   23678 TTATTTTTATTTTTTATTTTATTTATTTATTTATTTATTTATTTTGAGACAGGGTCTCAT 23737

Qy    1117 GCTGTCGCCCAGGCTGGAGTGCAGCGGCGTGATCACAGTTCACTGCAGCCTCAACCTTCT 1176
           ||||||| |||| ||| |||||| || |||||| ||| ||| |||| ||||  ||| |
Db   23738 TCTGTCGCACAGGTTGGCGTGCAGTGGTGTGATCTCAGCTCATTGCAACCTCTGCCTCCC 23797

Qy    1177 AGGCTCAAGGGATTCTCCCACCTCAGCCCCCCAAGTAGTTGGGACCACACGTATGCGCCA 1236
           | ||||||  || ||||||||||||||| ||  ||||| || ||| ||| ||||||||||
Db   23798 GGACTCAAGCAATCCTCCCACCTCAGCCTCCAGAGTAGCTGAGACTACAGGTATGCGCCA 23857

Qy    1237 CCATGCCTGGCTAATTTCTTATTTTTTTGTAGAGATAGGATCTCACTATATTGTCCAGGC 1296
           |||||||  |||||||| |    ||||||||||||| ||| | |||| || ||| ||||||
Db   23858 CCATGCCCAGCTAATTTTTGTACTTTTTGTAGAGACAGGGTTTCACCATGTTGCCCAGGC 23917

Qy    1297 TGGTCTTGAATTCCTGGGCTCAGGTGAGCCTCCCACCTGGGCCTCCCAAAGTACTGGGAT 1356
           | |||| ||| ||||| ||||| |  | || ||||| | ||||||||||| | |||||||
Db   23918 TAGTCTCGAACTCCTGAGCTCAAGCAATCCGCCCACTTTGGCCTCCCAAAATTCTGGGAT 23977

Qy    1357 TACAGGCATGAGCCAAGGTCCCCTGCCCATA 1387
           ||||||| |||||||  |  ||  | | | |
Db   23978 TACAGGCGTGAGCCACCGAGCCAGGTCAAGA 24008


RESULT 10
AAH18467/c
ID   AAH18467 standard; cDNA; 3417 BP.
XX
AC   AAH18467;
XX
DT   26-JUN-2001  (first entry)
XX
DE   Human cDNA sequence SEQ ID NO:18570.
XX
KW   Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss.
XX
OS   Homo sapiens.
XX
PN   EP1074617-A2.
XX
PD   07-FEB-2001.
XX
PF   28-JUL-2000; 2000EP-0116126.
XX
PR   29-JUL-1999;   99JP-0248036.
PR   27-AUG-1999;   99JP-0300253.
PR   11-JAN-2000; 2000JP-0118776.
PR   02-MAY-2000; 2000JP-0183767.
PR   09-JUN-2000; 2000JP-0241899.
XX
PA   (HELI-) HELIX RES INST.
XX
PI   Ota T,  Isogai T,  Nishikawa T,  Hayashi K,  Saito K,  Yamamoto J;
PI   Ishii S,  Sugiyama T,  Wakamatsu A,  Nagai K,  Otsuki T;
XX
DR   WPI; 2001-318749/34.
XX
PT   Primer sets for synthesizing polynucleotides, particularly the 5602
PT   full-length cDNAs defined in the specification, and for the detection
PT   and/or diagnosis of the abnormality of the proteins encoded by the
PT   full-length cDNAs -
XX
PS   Claim 8; SEQ ID 18570; 2537pp + CD ROM; English.
XX
CC   The present invention describes primer sets for synthesising 5602
CC   full-length cDNAs defined in the specification. Where a primer set
CC   comprises: (a) an oligo-dT primer and an oligonucleotide complementary
CC   to the complementary strand of a polynucleotide which comprises one of
CC   the 5602 nucleotide sequences defined in the specification, where the
CC   oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC   of an oligonucleotide comprising a sequence complementary to the
CC   complementary strand of a polynucleotide which comprises a 5'-end
CC   sequence and an oligonucleotide comprising a sequence complementary to a
CC   polynucleotide which comprises a 3'-end sequence, where the
CC   oligonucleotide comprises at least 15 nucleotides and the combination of
CC   the 5'-end sequence/3'-end sequence is selected from those defined in
CC   the specification. The primer sets can be used in antisense therapy and
CC   in gene therapy. The primers are useful for synthesising polynucleotides,
CC   particularly full-length cDNAs. The primers are also useful for the
CC   detection and/or diagnosis of the abnormality of the proteins encoded by
CC   the full-length cDNAs. The primers allow obtaining of the full-length
CC   cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC   AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to
CC   AAB95893 represent human amino acid sequences; and AAH13629 to AAH13632
CC   represent oligonucleotides, all of which are used in the exemplification
CC   of the present invention.
XX
SQ   Sequence 3417 BP; 1029 A; 698 C; 717 G; 973 T; 0 other;

  Query Match             5.7%;  Score 206;  DB 22;  Length 3417;
  Best Local Similarity   75.6%;  Pred. No. 8e-34;
  Matches  269;  Conservative    0;  Mismatches   85;  Indels    2;  Gaps    1;

Qy    1079 TTATTTATTTATTTATTTATTTTTTGAGATGGAGTCTGGC--TGTCGCCCAGGCTGGAGT 1136
           || ||| ||| ||| ||| |||||||||||||||||||| ||  ||| ||||||||||||
Db    1417 TTTTTTTTTTTTTTTTTTTTTTTTGAGATGGAGTCTTGCTTTGTTGCCCAGGCTGGAGG 1358

Qy    1137 GCAGCGGCGTGATCACAGTTCACTGCAGCCTCAACCTTCTAGGCTCAAGGGATTCTCCCA 1196
           |||| || |||||| | | |||||||| ||||  ||| | | | ||||| ||||||||
Db    1357 GCAGTGGAGTGATCTCGGCTCACTGCAACCTCCGCCTCCCAAGTTCAAGCGATTCTCCTG 1298

Qy    1197 CCTCAGCCCCCCAAGTAGTTGGGACCACACGTATGCGCCACCATGCCTGGCTAATTTCTT 1256
           ||||||||||| ||||| |||||  ||| | |  ||||||||||| |||||||| |
Db    1297 TCTCAGCCCCCCTAGTAGCTGGGATTACAGGCACCCGCCACCATGCCCGGCTAATTTTTA 1238

Qy    1257 ATTTTTTTGTAGAGATAGGATCTCACTATATTGTCCAGGCTGGTCTTGAATTCCTGGGCT 1316
           |||||  |||||||  |||| |||| || ||| ||||||||||||||| |||||  ||
Db    1237 TATTTTTAGTAGAGACGGGATTTCACCATGTTGGCCAGGCTGGTCTTGAACTCCTGACCT 1178

Qy    1317 CAGGTGAGCCTCCCACCTGGGCCTCCCAAAGTACTGGGATTACAGGCATGAGCCAAGGTC 1376
           ||||||| || ||  ||| |||||||||||| |||||||||||||||||||||||  |
Db    1177 CAGGTGATCCACCTGCCTTGGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACTGCG 1118

Qy    1377 CCCTGCCCATATGAGATTTTCTGTCTCTGATCCCATGCAGCTAGTAATCAAGGACT 1432
           ||| ||| | | || ||||       |   |    || |  |  ||  ||| || |
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Db   1117 CCCGGCCTAAAGGACATTTCGGTATACATTTAAAGTGAATGTTTTATACAATGAGT 1062


RESULT 11
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ID   ABA21094 standard; DNA; 1273 BP.
XX
AC   ABA21094;
XX
DT   23-JAN-2002  (first entry)
XX
DE   Human nervous system related polynucleotide SEQ ID NO 13425.
XX
KW   Human; nootropic; neuroprotective; cytostatic; dermatological; virucide;
KW   immunosuppressive; antiinflammatory; anti-HIV; antibacterial; vulnerary;
KW   antiparkinsonian; antisickling; antianaemic; antiarthritic; cancer;
KW   antirheumatic; hepatotropic; cerebroprotective; antiinflammatory;
KW   antiallergic; antidiabetic; antiulcer; anticonvulsant; antifungal;
KW   antiparasitic; cardiant; immune disorder; cardiovascular disorder;
KW   neurological disease; infection; nephrotropic; gene therapy; vaccine; ds.
XX
OS   Homo sapiens.
XX
PN   WO200159063-A2.
XX
PD   16-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US01334.
XX
PR   31-JAN-2000; 2000US-0179065.
PR   04-FEB-2000; 2000US-0180628.
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PR   18-APR-2000; 2000US-0198123.
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PR   07-JUN-2000; 2000US-0209467.
PR   28-JUN-2000; 2000US-0214886.
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PR   17-NOV-2000; 2000US-0249244.
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PR   06-DEC-2000; 2000US-0251479.
PR   08-DEC-2000; 2000US-0251856.
PR   08-DEC-2000; 2000US-0251868.
PR   08-DEC-2000; 2000US-0251869.
PR   08-DEC-2000; 2000US-0251989.
PR   08-DEC-2000; 2000US-0251990.
PR   11-DEC-2000; 2000US-0254097.
PR   05-JAN-2001; 2001US-0259678.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-541565/60.
XX
PT   Nucleic acids encoding 3224 human nervous system antigen polypeptides,
PT   useful for preventing, diagnosing and/or treating nervous system
PT   cancers and metastases -
XX
PS   Disclosure; SEQ ID NO 13425; 1701pp + Sequence Listing; English.
XX
CC   The invention relates to novel genes (ABA11004-ABA21534) and proteins
CC   (ABB14678-ABB18001) useful for preventing, treating or ameliorating
CC   medical conditions e.g. by protein or gene therapy. The genes are
CC   isolated from a range of human tissues disclosed in the specification.
CC   The nucleic acids, proteins, antibodies and (ant)agonists are useful
CC   in the diagnosis, treatment and prevention of: (a) cancer, e.g. breast
CC   and ovarian cancer and other cancers of the adrenal gland, bone, bone
CC   marrow, breast, gastrointestinal tract, liver, lung, or urogenital;
CC   (b) immune disorders e.g. Addison's disease, allergies, autoimmune
CC   haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's
CC   disease, multiple sclerosis, rheumatoid arthritis and ulcerative
CC   colitis; (c) cardiovascular disorders such as myocardial ischaemias;
CC   (d) wound healing; (e) neurological diseases e.g. cerebral anoxia and
CC   epilepsy; and (f) infectious diseases such as viral, bacterial, fungal
CC   and parasitic infections.
CC   Note: The sequence data for this patent did not form part of the
CC   printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 1273 BP; 395 A; 229 C; 279 G; 370 T; 0 other;

  Query Match             5.7%;  Score 205.4;  DB 22;  Length 1273;
  Best Local Similarity   75.7%;  Pred. No. 8e-34;
  Matches  281;  Conservative    0;  Mismatches   86;  Indels    4;  Gaps    2;

Qy   1021 ATTGAGACTGGGTAGACAGGTGAAAACCATATCAGGTTTTTAATTTTTTAATTTTTAATT 1080
           ||| | |  |   | | | ||  | ||      |  | ||||| ||   | ||||| |||
Db    998 ATTAAAAAAGAAAATATATGTACACACATATAAATATATTTAAGTTCACACTTTTTTATT 939

Qy   1081 ATTTATTTATTTATTTATTTTTTGAGATGGAGTCTGGCTGTC---GCCCAGGCTGGAGTG 1137
            ||||||||||||||||||| ||||||  |||| |  || ||   |||||||| |||||
Db    938 TTTTATTTATTTATTTATTTATTGAGACAGAGTTTCACTCTCGTTGCCCAGGCTAGAGTG 879

Qy   1138 CAGCGGCGTGATCACAGTTCACTGCAGCCTCAACCTTCTAGGCTCAAGGGATTCTCCCAC 1197
           ||  ||| ||||| | | |||||||| |||| |||| |  || ||||| ||||||||||
Db    878 CAATGGCATGATCTCGGCTCACTGCAACCTCCACCTCCCGGGTTCAAGCGATTCTCCCAC 819

Qy   1198 CTCAGCCCCCCAAGTAGTTGGGACCACACGTATGCGCCACCATGCCTGGCTAATTTCTTA 1257
           ||||||| ||  ||||| ||||| ||| | ||| |||||||  |||||||| |||  ||
Db    818 CTCAGCCTCCTGAGTAGCTGGGATGACAGGCATGTGCCACCACACCTGGCTATTTTTGTA 759

Qy   1258 TTTTTTTGTAGAGATAGGATCTCACTATATTGTCCAGGCTGGTCTTGAATTCCTGGGCTC 1317
           ||||| |||||||| || | ||| |||||| |||||||||||||| || ||  |||
Db    758 -TTTTTAGTAGAGATGGGGTTTCATCATATTGGTCAGGCTGGTCTTGAACTCTTGACCTC 700

Qy   1318 AGGTGAGCCTCCCACCTGGGCCTCCCAAAGTACTGGGATTACAGGCATGAGCCAAGGTCC 1377
           |||||| || ||||||| |||||||||||| |||||||||||||||||||   | |
Db    699 AGGTGATCCGCCCACCTCGGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACTATGC 640

Qy   1378 CCTGCCCATAT 1388
           || ||||| ||
Db    639 CCGGCCCACAT 629


RESULT 12
AAC99845/c
ID   AAC99845 standard; cDNA; 1376 BP.
XX
AC   AAC99845;
XX
DT   13-MAR-2001  (first entry)
XX
DE   Human secreted protein gene 28 SEQ ID NO:38.
XX
KW   Human; secreted protein; diagnosis; immunosuppressive; antiarthritic;
KW   antirheumatic; antiproliferative; cytostatic; cardiant; vasotropic;
KW   cerebroprotective; nootropic; neuroprotective; antibacterial; virucide;
KW   fungicide; ophthalmological; gene therapy; pathological condition;
KW   autoimmune disease; rheumatoid arthritis; hyperproliferative disorder;
KW   neoplasm; cardiovascular disorder; cardiac arrest; cerebral ischaemia;
KW   cerebrovascular disorder; angiogenesis; nervous system disorder;
KW   Alzheimer's disease; infection; ocular disorder; corneal infection;
KW   wound healing; skin aging; food additive; preservative;
KW   chromosome 11; ss.
XX
OS   Homo sapiens.
XX
PN   WO200070042-A1.
XX
PD   23-NOV-2000.
XX
PF   11-MAY-2000; 2000WO-US12788.
XX
PR   13-MAY-1999;   99US-0134068.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Ruben SM,  Moore PA,  Young PE,  Komatsoulis GA,  Birse CE;
PI   Duan RD,  Florence KA,  Soppet DR;
XX
DR   WPI; 2000-679828/66.
DR   P-PSDB; AAB56104.
XX
PT   Isolated nucleic acid molecule encoding a human secreted protein is
PT   used in preventing, treating or ameliorating a medical condition  -
XX
PS   Claim 1; Page 871; 1065pp; English.
XX
CC   The polynucleotide sequences given in AAC99818 to AAC99977 encode the
CC   human secreted proteins given in AAB56077 to AAB56362. Human secreted
CC   proteins have activities based on the tissues and cells the genes are
CC   expressed in. Examples of activities include: immunosuppressive;
CC   antiarthritic; antirheumatic; antiproliferative; cytostatic; cardiant;
CC   vasotropic; cerebroprotective; nootropic; neuroprotective; antibacterial;
CC   virucide; fungicide; and opthalmalogical. The human secreted
CC   polynucleotides and proteins can be used to prevent, treat or ameliorate
CC   a medical condition in e.g. humans, mice, rabbits, goats, horses, cats,
CC   dogs, chickens or sheep. They are also used in diagnosing a pathological
CC   condition or susceptibility to a pathological condition. Disorders which
CC   are diagnosed or treated include autoimmune diseases e.g. rheumatoid
CC   arthritis, hyperproliferative disorders e.g. neoplasms of the breast or
CC   liver, cardiovascular disorders e.g. cardiac arrest, cerebrovascular
CC   disorders e.g. cerebral ischaemia, angiogenesis, nervous system disorders
CC   e.g. Alzheimer's disease, infections caused by bacteria, viruses and
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CC   fungi and ocular disorders e.g. corneal infection. The proteins can also
CC   be used to aid wound healing and epithelial cell proliferation, to
CC   prevent skin aging due to sunburn, to maintain organs before
CC   transplantation, for supporting cell culture of primary tissues, to
CC   regenerate tissues and in chemotaxis. The proteins can also be used as a
CC   food additive or preservative to increase or decrease storage
CC   capabilities. AAC99809 to AAC99817 and AAB56076 represent sequences used
CC   in the exemplification of the present invention.
XX
SQ   Sequence 1376 BP; 320 A; 324 C; 375 G; 341 T; 16 other;

  Query Match             5.7%;  Score 205;  DB 21;  Length 1376;
  Best Local Similarity   76.9%;  Pred. No. 1e-33;
  Matches  250;  Conservative    0;  Mismatches   75;  Indels    0;  Gaps    0;

Qy   1071 ATTTTTAATTATTTATTTATTTATTTATTTTTTGAGATGGAGTCTGGCTGTCGCCCAGGC 1130
Db   1327 AGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTGAGACAGAGTCTCACTCTGTCCCCCAGGC 1268

Qy   1131 TGGAGTGCAGCGGCGTGATCACAGTTCACTGCAGCCTCAACCTTCTAGGCTCAAGGGATT 1190
Db   1267 TGGAGTGCAATGGCGTGATCTCGGCTCACTGCAGCCTCCACCTCCCAGGTTCAAGAGATT 1208

Qy   1191 CTCCCACCTCAGCCCCCCAAGTAGTTGGGACCACACGTATGCGCCACCATGCCTGGCTAA 1250
Db   1207 CTCCTGCCTCAGCCTCCCGAGTAGTTGGGATTACAGGTGTCTGCCACCACGCCCGGCTAC 1148

Qy   1251 TTTCTTATTTTTTTGTAGAGATAGGATCTCACTATATTGTCCAGGCTGGTCTTGAATTCC 1310
Db   1147 TTTTTGTATTTTTAGTAGAGACAGGGTTTCGCCATGTTGGTCAGGCTGGTCTTGAACTCC 1088

Qy   1311 TGGGCTCAGGTGAGCCTCCCACCTGGGCCTCCCAAAGTACTGGGATTACAGGCATGAGCC 1370
Db   1087 TGACCTCAGGTGATCCACCCACCTTGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCA 1028

Qy   1371 AAGGTCCCCTGCCCATATGAGATTT 1395
Db   1027 ACCGCCCCCAGCTGGGAGCAGAGTT 1003


RESULT 13
AAK83329/c
ID   AAK83329 standard; DNA; 10800 BP.
XX
AC   AAK83329;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:38141.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US01354.
XX
PR   31-JAN-2000; 2000US-0179065.
PR   04-FEB-2000; 2000US-0180628.
PR   24-FEB-2000; 2000US-0184664.
PR   02-MAR-2000; 2000US-0186350.
PR   16-MAR-2000; 2000US-0189874.
PR   17-MAR-2000; 2000US-0190076.
PR   18-APR-2000; 2000US-0198123.
PR   19-MAY-2000; 2000US-0205515.
PR   07-JUN-2000; 2000US-0209467.
PR   28-JUN-2000; 2000US-0214886.
PR   30-JUN-2000; 2000US-0215135.
PR   07-JUL-2000; 2000US-0216647.
PR   07-JUL-2000; 2000US-0216880.
PR   11-JUL-2000; 2000US-0217487.
PR   11-JUL-2000; 2000US-0217496.
PR   14-JUL-2000; 2000US-0218290.
PR   26-JUL-2000; 2000US-0220963.
PR   26-JUL-2000; 2000US-0220964.
PR   14-AUG-2000; 2000US-0224518.
PR   14-AUG-2000; 2000US-0224519.
PR   14-AUG-2000; 2000US-0225213.
PR   14-AUG-2000; 2000US-0225214.
PR   14-AUG-2000; 2000US-0225266.
PR   14-AUG-2000; 2000US-0225267.
PR   14-AUG-2000; 2000US-0225268.
PR   14-AUG-2000; 2000US-0225270.
PR   14-AUG-2000; 2000US-0225447.
PR   14-AUG-2000; 2000US-0225757.
PR   14-AUG-2000; 2000US-0225758.
PR   14-AUG-2000; 2000US-0225759.
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PR   22-AUG-2000; 2000US-0226681.
PR   22-AUG-2000; 2000US-0226868.
PR   22-AUG-2000; 2000US-0227182.
PR   23-AUG-2000; 2000US-0227009.
PR   30-AUG-2000; 2000US-0228924.
PR   01-SEP-2000; 2000US-0229287.
PR   01-SEP-2000; 2000US-0229343.
PR   01-SEP-2000; 2000US-0229344.
PR   01-SEP-2000; 2000US-0229345.
PR   05-SEP-2000; 2000US-0229509.
PR   05-SEP-2000; 2000US-0229513.
PR   06-SEP-2000; 2000US-0230437.
PR   06-SEP-2000; 2000US-0230438.
PR   08-SEP-2000; 2000US-0231242.
PR   08-SEP-2000; 2000US-0231243.
PR   08-SEP-2000; 2000US-0231244.
PR   08-SEP-2000; 2000US-0231413.
PR   08-SEP-2000; 2000US-0231414.
PR   08-SEP-2000; 2000US-0232080.
PR   08-SEP-2000; 2000US-0232081.
PR   12-SEP-2000; 2000US-0231968.
PR   14-SEP-2000; 2000US-0232397.
PR   14-SEP-2000; 2000US-0232398.
PR   14-SEP-2000; 2000US-0232399.
PR   14-SEP-2000; 2000US-0232400.
PR   14-SEP-2000; 2000US-0232401.
PR   14-SEP-2000; 2000US-0233063.
PR   14-SEP-2000; 2000US-0233064.
PR   14-SEP-2000; 2000US-0233065.
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PR   21-SEP-2000; 2000US-0234274.
PR   25-SEP-2000; 2000US-0234997.
PR   25-SEP-2000; 2000US-0234998.
PR   26-SEP-2000; 2000US-0235484.
PR   27-SEP-2000; 2000US-0235834.
PR   27-SEP-2000; 2000US-0235836.
PR   29-SEP-2000; 2000US-0236327.
PR   29-SEP-2000; 2000US-0236367.
PR   29-SEP-2000; 2000US-0236368.
PR   29-SEP-2000; 2000US-0236369.
PR   29-SEP-2000; 2000US-0236370.
PR   02-OCT-2000; 2000US-0236802.
PR   02-OCT-2000; 2000US-0237037.
PR   02-OCT-2000; 2000US-0237038.
PR   02-OCT-2000; 2000US-0237039.
PR   02-OCT-2000; 2000US-0237040.
PR   13-OCT-2000; 2000US-0239935.
PR   13-OCT-2000; 2000US-0239937.
PR   20-OCT-2000; 2000US-0240960.
PR   20-OCT-2000; 2000US-0241221.
PR   20-OCT-2000; 2000US-0241785.
PR   20-OCT-2000; 2000US-0241786.
PR   20-OCT-2000; 2000US-0241787.
PR   20-OCT-2000; 2000US-0241808.
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PR   20-OCT-2000; 2000US-0241809.
PR   20-OCT-2000; 2000US-0241826.
PR   01-NOV-2000; 2000US-0244617.
PR   08-NOV-2000; 2000US-0246474.
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PR   08-NOV-2000; 2000US-0246477.
PR   08-NOV-2000; 2000US-0246478.
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PR   08-NOV-2000; 2000US-0246613.
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PR   17-NOV-2000; 2000US-0249209.
PR   17-NOV-2000; 2000US-0249210.
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PR   17-NOV-2000; 2000US-0249212.
PR   17-NOV-2000; 2000US-0249213.
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PR   17-NOV-2000; 2000US-0249215.
PR   17-NOV-2000; 2000US-0249216.
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PR   17-NOV-2000; 2000US-0249218.
PR   17-NOV-2000; 2000US-0249244.
PR   17-NOV-2000; 2000US-0249245.
PR   17-NOV-2000; 2000US-0249264.
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PR   17-NOV-2000; 2000US-0249297.
PR   17-NOV-2000; 2000US-0249299.
PR   17-NOV-2000; 2000US-0249300.
PR   01-DEC-2000; 2000US-0250160.
PR   01-DEC-2000; 2000US-0250391.
PR   05-DEC-2000; 2000US-0251030.
PR   05-DEC-2000; 2000US-0251988.
PR   05-DEC-2000; 2000US-0256719.
PR   06-DEC-2000; 2000US-0251479.
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PR   08-DEC-2000; 2000US-0251868.
PR   08-DEC-2000; 2000US-0251869.
PR   08-DEC-2000; 2000US-0251989.
PR   08-DEC-2000; 2000US-0251990.
PR   11-DEC-2000; 2000US-0254097.
PR   05-JAN-2001; 2001US-0259678.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-483426/52.
XX
PT   Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT   useful for preventing, diagnosing and/or treating cancers and
PT   metastasis -
XX
PS   Disclosure; SEQ ID NO 38141; 3071pp + Sequence Listing; English.
XX
CC   AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC   amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC   activity, and can be used in gene therapy and vaccine production. (I)
CC   proteins and polynucleotides may be used in the prevention, diagnosis and
CC   treatment of diseases associated with inappropriate (I) expression. For
CC   example, they may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting
CC   the nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention.
XX
SQ   Sequence 10800 BP; 2381 A; 2741 C; 3222 G; 2456 T; 0 other;

  Query Match             5.7%;  Score 205;  DB 22;  Length 10800;
  Best Local Similarity   73.2%;  Pred. No. 1.8e-33;
  Matches  276;  Conservative    0;  Mismatches  100;  Indels    1;  Gaps    1;

Qy   1019 TGATTGAGACTGGGTAGACAGGTGAAAACCATATCAGGTTTTTAATTTTTTAATTTTTAA 1078
          || |   || |||| ||    | | |||| |   ||||    |  ||  |   |||||
Db   3742 TGCTGCTGAGTGGGGAGGTCAGAGGAAACTAGGGCAGGAGAGTTGTTGCTGTTTTTTTT 3683

Qy   1079 TTATTTATTTATTTATTTATTTTTGAGATGGAGTCTGGCTGTCGCCCAGGCTGGAGTGC 1138
          ||  || ||| ||| ||| ||||  || |  |  ||   ||||| ||||||||||||||
Db   3682 TTGGTT-TTTTTTTTTTTTTTTGAGACAGAGTCTCACTCTGTCCCCCAGGCTGGAGTGC 3624

Qy   1139 AGCGGCGTGATCACAGTTCACTGCAGCCTCAACCTTCTAGGCTCAAGGGATTCTCCCACC 1198
          |  |||||||| | | ||||||||||||| |||| | ||| ||||| ||||||||  ||
Db   3623 AATGGCGTGATCTCGGCTCACTGCAGCCTCCACCTCCCAGGTTCAAGAGATTCTCCTGCC 3564

Qy   1199 TCAGCCCCCCAAGTAGTTGGGACCACACGTATGCGCCACCATGCCTGGCTAATTTCTTAT 1258
          |||||| ||| ||||||||||  ||| || |  ||||||| ||| ||||| ||| |
Db   3563 TCAGCCTCCCGAGTAGTTGGGATTACAGGTGTCTGCCACCACGCCCGGCTACTTTTTGTA 3504

Qy   1259 TTTTTTGTAGAGATAGGATCTCACTATATTGTCCAGGCTGGTCTTGAATTCCTGGGCTCA 1318
          ||||| ||||||| ||| | || | || |||  |||||||||||||||| |||||  ||||
Db   3503 TTTTTAGTAGAGACAGGGTTTCGCCATGTTGGTCAGGCTGGTCTTGAACTCCTGACCTCA 3444

Qy   1319 GGTGAGCCTCCCACCTGGGCCTCCCAAAGTACTGGGATTACAGGCATGAGCCAAGGTCCC 1378
          ||||| || ||||||| |||||||||||| |||||||||||||| |||||||  | |||
Db   3443 GGTGATCCACCCACCTTGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACCGCCCC 3384

Qy   1379 CTGCCCATATGAGATTT 1395
          | ||    |  ||| ||
Db   3383 CAGCTGGGAGCAGAGTT 3367


RESULT 14
ABL58699/c
ID   ABL58699 standard; DNA; 29629 BP.
XX
AC   ABL58699;
XX
DT   27-AUG-2002  (first entry)
XX
DE   Human kinase encoding genomic DNA.
XX
KW   Human; kinase protein; calcium/calmodulin-dependant protein kinase;
KW   eye; retinoblastoma; brain; kinase modulator; gene; chromosome 17;
KW   SNP; single nucleotide polymorphism; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   variation       relace (2082, G)
FT                   /*tag=  a
FT                   /standard_name= "single nucleotide polymorphism"
FT   variation       relace (2747..2748, G, GC, GA)
FT                   /*tag=  b
FT                   /standard_name= "single nucleotide polymorphism"
FT   CDS             3000..26631
FT                   /*tag=  c
FT                   /product= "human kinase"
FT                   /note= "contains 14 introns"
FT   exon            3000..3359
FT                   /*tag=  d
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FT                   /number= 1
FT   intron          3360..4259
FT                   /*tag=  e
FT                   /number= 1
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FT                   /*tag=  f
FT                   /number= 2
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FT                   /number= 3
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FT                   /*tag=  i
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FT                   /*tag=  k
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FT   exon            5512..5645
FT                   /*tag=  l
FT                   /number= 5
FT   intron          5646..6122
FT                   /*tag=  m
FT                   /number= 5
FT   exon            6123..6159
FT                   /*tag=  n
FT                   /number= 6
FT   intron          6160..7038
FT                   /*tag=  o
FT                   /number= 6
FT   exon            7039..7060
FT                   /*tag=  p
FT                   /number= 7
FT   intron          7061..8252
FT                   /*tag=  q
FT                   /number= 7
FT   exon            8253..8341
FT                   /*tag=  r
FT                   /number= 8
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FT                   /*tag=  s
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FT   variation       relace (10187, G)
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FT   variation       relace (10216, C)
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FT                   /standard_name= "single nucleotide polymorphism"
FT   variation       relace (11100, A)
FT                   /*tag=  w
FT                   /standard_name= "single nucleotide polymorphism"
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FT                   /standard_name= "single nucleotide polymorphism"
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FT   exon            12265..12464
FT                   /*tag=  z
FT                   /number= 9
FT   intron          12465..15226
FT                   /*tag=  aa
FT                   /number= 9
FT   variation       relace (15095, T)
FT                   /*tag=  ab
FT                   /standard_name= "single nucleotide polymorphism"
FT   variation       relace (15116, G)
FT                   /*tag=  ac
FT                   /standard_name= "single nucleotide polymorphism"
FT   exon            15227..15280
FT                   /*tag=  ad
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FT   intron          15281..16061
FT                   /*tag=  ae
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FT                   /*tag=  af
FT                   /standard_name= "single nucleotide polymorphism"
FT   variation       relace (15827, C)
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FT                   /standard_name= "single nucleotide polymorphism"
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FT                   /*tag=  ah
FT                   /number= 11
FT   variation       relace (16135, A)
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FT   intron          16136..18797
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FT   variation       relace (16557, A)
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FT   variation       relace (17375, C, T, G, A)
FT                   /*tag=  al
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FT   variation       relace (17928, C)
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FT                   /*tag=  ar
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FT                   /number= 13
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FT                   /standard_name= "single nucleotide polymorphism"
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FT                   /standard_name= "single nucleotide polymorphism"
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KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
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OS   Homo sapiens.
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XX

PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and
PT metastasis -
XX
PS Disclosure; SEQ ID NO 34572; 3071pp + Sequence Listing; English.
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CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting
CC the nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention.
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SQ Sequence 20601 BP; 5874 A; 4297 C; 4363 G; 6067 T; 0 other;

Query Match 5.7%; Score 204.8; DB 22; Length 20601;
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